

Replace “Air Over Oil” Systems with Electric Two Axis Actuators

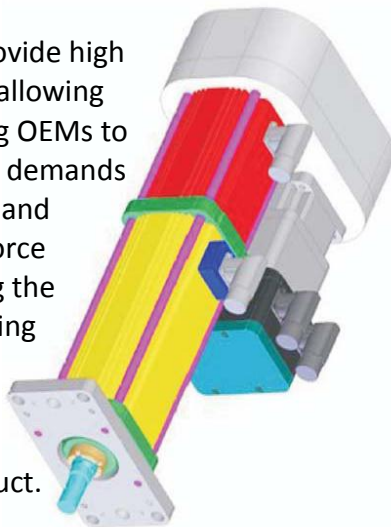
High Force, Increased Cycle Rates and Shortened Cycle Times

Application Challenge: Many pressing applications such as riveting, applying self-clenching fasteners, or joining two or more materials by disrupting the material itself have historically been performed by “air-over-oil” systems that use the air cylinder action to provide high speed, and the hydraulic cylinder to provide high force. Exlar manufactures custom and standard two-axis electromechanical actuators that eliminate this need for air-over-oil systems in pressing applications.

Exlar Solution: Providing a high linear velocity when low force is required and high force at a lower speed has always been an electro-mechanical challenge. Exlar has met that challenge with two axis pressing actuators for a clean solution.

Exlar Products:

These actuators provide high speed at low force allowing fastening or riveting OEMs to meet the cycle rate demands of their customers, and transition to high force at low speed during the press stroke. Pressing forces in excess of 16,700 pounds (71kN) are offered in this unique product.



Benefits of Electric Actuators:

- With an Exlar actuator you will save space. The brushless servo motor and linear actuator are integrated into a single unit with a smaller footprint than many hydraulic, pneumatic or ball screw systems.
- Cycle rates can be increased through the high speed capability of Exlar’s linear actuators – speeds as high as 40 linear inches/second, and the control benefits of servo technology.
- Your rivet upset force will be consistent, and produce more repeatable rivet height because of the inherent accuracy and repeatability of an electromechanical servo-based system.
- Low maintenance and long life are certain benefits of an electric actuator system. A roller screw actuator provides as much as 15 times the life of similar size ball screw actuators. You can minimize downtime with a system designed for the rigors of continuous duty, high velocity, and high force.
- The high shock load capacity of Exlar’s roller screw actuators allows them to act directly as the upset force in the riveting, fastening or joining application.
- An Exlar electric liner actuator provides a higher mechanical stiffness than most other actuator solutions. This results in low losses and repeatable fastener height.

Call us today at 952-500-6200 to discuss your application. You may also visit www.exlar.com to locate the sales rep nearest you.